

Amendments to the Specification

Please replace paragraph on page 5, line 10 - page 6, line 1 with the following amended paragraph:

In the present invention, some signals are transmitted for confirming the connection condition of both apparatuses or transmitting clocks even when data is not transmitted through the transfer paths that connect two apparatuses. All the apparatuses support the function of monitoring signals transmitted to a transfer path on the reception side and detecting whether the reception side transfer path is under a state where it can execute the data transmission. Therefore, let's consider a case, for example, where the apparatus A detects the occurrence of a failure in a transfer path for receiving data from the apparatus B. At this time, the apparatus A intentionally stops sending all the signals to the transfer path for transmitting data to the apparatus B. On the other hand, the apparatus B judges that any failure occurs in the ~~transfer path for receiving the data from the apparatus A~~ transfer path between the apparatus A and the apparatus B by detecting the non-arrival of all the signals from the apparatus A. As a result, both apparatuses can reliably detect the occurrence of the failure even when the failure occurs in only a unidirectional transfer path of the transfer paths that point-to-point connect the two apparatuses.

Please replace paragraph on page 8, line 26 - page 9, line 7 with the following amended paragraph:

The first embodiment of the present invention will be explained. In this embodiment, one cable incorporating a plurality of transfer paths connects two apparatus A and B, whereby the first transfer path transmits data from the apparatus

A to the apparatus B and a second transfer path transmits data from the apparatus B to the apparatus A. Incidentally, these apparatuses may be inter-network apparatuses such as ~~computers~~computers, hubs, routers, LAN switches, and so forth.

Please replace paragraph on page 23, lines 1-17 with the following amended paragraph:

The explanation given above explains the processing flow starting from Step 4001 in the apparatus A2000 and the processing flow ~~staring~~starting from Step 4101 in the apparatus B1100. However, both of these flows should be executed in both apparatuses A1000 and B1000. The processing flow that starts from Step 4001 and transmits spontaneously the link-up signal to confirm the condition of the mating apparatus is executed with a predetermined cycle. This cycle is longer than the cycle that is determined by Step 4002 and the insensitive time of Step 4005, but is a time sufficient to detect quickly elimination of the line failure. In the 10 Base-T technology using the twist-pair cables, for example, this time is believed to be preferably about 0.3 to 0.5 seconds or so. When the cycle is longer than this time, the detection is retarded even when the line failure is solved, and the time necessary for restoring the normal communication becomes longer.